

# GENERAL TRAUMA FACILITY CRITERIA

**DRAFT - March 17, 1999**

General Trauma Facility (Level III) - provides resuscitation, stabilization, and assessment of injury victims and either provides treatment or arranges for appropriate transfer to a higher level trauma facility (see attached standards).

<b>A. HOSPITAL ORGANIZATION</b>	
<b>1. TRAUMA SERVICE</b>  *This requirement is an essential element for the "lead" hospitals in a trauma service area.	D*
<b>2. TRAUMA SERVICE COMPONENTS (for hospitals with no trauma service)</b>	
a. An identified Trauma Medical Director (TMD) who is a general surgeon and is charged with overall management of trauma services provided by the hospital.  The TMD shall be credentialed by the hospital to participate in the resuscitation and treatment of trauma patients to include board certification, trauma continuing medical education, compliance with trauma protocols, and participation in the trauma performance improvement program.  The TMD shall be currently credentialed in Advanced Trauma Life Support (ATLS) or an equivalent course approved by the Texas Department of Health (TDH).  There be shall a defined job description and organization chart delineating the TMD's role and responsibilities.	E
b. An identified Trauma Coordinator, who is a registered nurse and has the authority and responsibility to monitor trauma patient care from ED admission through discharge.  There shall be a defined job description and organizational chart delineating the Trauma Coordinator's role and responsibilities.	E
c. An identified Trauma Registrar who has appropriate training in injury severity scaling.	E

d.	Written protocols for: 1) Trauma team activation 2) Identification of trauma team responsibilities during a resuscitation 3) Resuscitation and Treatment 4) Admission and transfer	E
e.	All major and severe trauma patients should be admitted to an appropriate surgeon and all multi-system trauma patients should be admitted to a general surgeon.	E
f.	Written standards on nursing care for trauma patients for all units (i.e. ED, ICU, OR, PACU, general wards) in the trauma facility are to be implemented	E
<b>3.</b>	<b>SURGERY DEPARTMENTS/DIVISIONS/SERVICES/SECTIONS</b>	
<b>a.</b>	<b>General Surgery</b>	E
<b>b.</b>	<b>Orthopedic Surgery</b>	D
<b>c.</b>	<b>Neurosurgery</b>	D
<b>4.</b>	<b>EMERGENCY DEPARTMENT/DIVISION/SERVICE/SECTION/ROOM</b>	E
<b>5.</b>	<b>SURGICAL SPECIALTIES AVAILABILITY</b>	
a.	On-call and promptly available from inside or outside hospital  The staff specialists on-call will be immediately advised and will be promptly available. This capability will be continuously monitored by the performance improvement program.	

<p><b>General Surgery</b></p> <p>A physician who is providing this coverage shall be credentialed by the TMD to participate in the resuscitation and treatment of trauma patients to include requirements such as board certification/eligibility, trauma continuing medical education, compliance with trauma protocols, and participation in the trauma performance improvement program.</p> <p>In hospitals with surgical residency programs, evaluation and treatment may be started by a team of surgeons that will include a PGY4 or more senior surgical resident who is a member of that hospital's residency program. The attending surgeon's participation in major therapeutic decisions, presence in the emergency department for major resuscitations, and presence at operative procedures are mandatory. Compliance with these criteria and their appropriateness must be monitored by the trauma PI program.</p> <p>A physician who is providing this coverage shall be currently credentialed in ATLS or an equivalent course approved by TDH.</p> <p>Communication should be such that the general surgeon will be present in the ED at the time of arrival of the severe or major trauma patient; maximum response time of the surgeon should be 30 minutes from trauma team activation.</p> <p>There shall be a documented system for obtaining general surgery care for situations when the general surgeon on call is unavailable. This system will be continuously monitored by the performance improvement program.</p>	E
<p><b>Neurosurgery</b></p> <p>A physician who is providing this coverage should be currently credentialed in ATLS or an equivalent course approved by TDH.</p>	D
<p><b>Ophthalmic Surgery</b></p>	D
<p><b>Orthopedic Surgery</b></p> <p>A physician who is providing this coverage should be currently credentialed in ATLS or an equivalent course approved by TDH.</p>	D
<p><b>Otorhinolaryngologic Surgery</b></p>	D
<p><b>Thoracic Surgery</b></p>	D
<p><b>Urologic Surgery</b></p>	D
<p><b>6. NON-SURGICAL SPECIALTIES AVAILABILITY</b></p> <p>a. In-house 24 hours a day</p>	

<p><b>Emergency Medicine</b></p> <p>A physician who is providing this coverage shall be currently credentialed in ATLS or an equivalent course approved by the TDH.</p> <p>A physician who is providing this coverage should be credentialed by the hospital to participate in the resuscitation and treatment of trauma patients to include requirements such as board certification, trauma continuing medical education, compliance with trauma protocols, and participation in the trauma performance improvement program.</p>	E
<p>b. On-call and promptly available from inside or outside the hospital:</p>	
<p><b>Anesthesiology</b></p> <p>Requirements may be fulfilled by a member of the anesthesia care team credentialed by the hospital to participate in the resuscitation and treatment of trauma patients which may include requirements such as board certification, trauma continuing education, compliance with trauma protocols, and participation in the trauma performance improvement program.</p> <p>A health care professional who provides this coverage should be currently credentialed in ATLS, ACLS, and PALS or equivalent courses approved by the TDH.</p>	E
<p><b>Cardiology</b></p>	D
<p><b>Family Medicine</b></p> <p>The patient's primary care physician should be notified at an appropriate time.</p>	D
<p><b>Hematology</b></p>	D
<p><b>Internal Medicine</b></p> <p>The patient's primary care physician should be notified at an appropriate time.</p>	E
<p><b>Nephrology</b></p>	D
<p><b>Pathology</b></p>	D
<p><b>Pediatrics</b></p> <p>The patient's primary care physician should be notified at an appropriate time.</p>	D
<p><b>Radiology</b></p>	D

<b>B. SPECIAL FACILITIES/RESOURCES/CAPABILITIES</b>		
<b>1. EMERGENCY DEPARTMENT</b>		
a)	Designated physician director	E
b)	Physician with special competence in care of critically injured who is designated member of the trauma team and physically present in the ED 24 hours a day  A physician who is providing this coverage shall be credentialed in ATLS or an equivalent course approved by TDH.  This requirement may be fulfilled by a physician credentialed by the hospital to provide emergency medical services.	E
c)	Nurse staffing in initial resuscitation area is based on patient acuity and trauma team composition based on historical census and acuity data	E
	A minimum of two registered nurses who have trauma nursing training will participate in initial major trauma resuscitation	D
	Nursing documentation for trauma patients is systematic and meets the trauma registry guidelines	E
	100% of nursing staff has successfully completed ACLS (or hospital equivalent) and a nationally recognized pediatric advanced life support course (i.e. PALS, ENPC) within six months of the date of employment in the ED or date of designation	D
	100% of registered nursing staff has successfully completed TNCC, or TDH approved equivalent, within 18 months of date of employment in the ED or date of designation	E
d)	Two-way communication with vehicles of prehospital emergency medical services	E
e)	Equipment and services for resuscitation, evaluation, and to provide life support for the critically or seriously injured shall include but not be limited to:	
	Airway control and ventilation equipment including laryngoscope and endotracheal tubes of all sizes, bag-mask resuscitator, pocket masks, oxygen, and mechanical ventilator	E
	Suction devices	E
	Electrocardiograph-oscilloscope-defibrillator	E
	Apparatus to establish central venous pressure monitoring	E

All standard intravenous fluids and administration devices, including intravenous catheters and rapid infusion devices	E
Sterile surgical sets for procedures standard for ED, such as thoracostomy, venesection diagnostic peritoneal lavage, cricothyrotomy, etc.	E
Gastric lavage equipment	E
Drugs and supplies necessary for emergency care	E
Cervical spine stabilization device	E
Long bone stabilization device	E
Thermal control equipment for patients and a rapid warming device for blood and fluids	E
Non-invasive continuous blood pressure monitoring devices	E
Transcutaneous oximeter	E
End tidal CO <sub>2</sub> monitor	E
X-ray capability	E
The technician will be on-call and promptly available.	
Support Services	D
These services will be promptly available.	

<b>2. OPERATING SUITE</b>	E
a) Operating room services will be available 24 hours a day. With advanced notice, the Operating Room should be opened and ready to accept a patient within 30 minutes. This system will be continuously monitored by the performance improvement program.	E
b) Equipment - special requirements shall include but not be limited to:  Thermal control equipment for patient and for blood and fluids X-ray capability including c-arm image intensifier with technologist available 24 hours a day Endoscopes, all varieties Monitoring equipment 1) the capability to measure pulmonary capillary wedge pressure 2) the capability to measure invasive systemic arterial pressure	E D E E D D
<b>3. POSTANESTHETIC RECOVERY ROOM</b> (surgical intensive care unit is acceptable)	
a) Registered nurses and other essential personnel 24 hours a day	E
b) Appropriate monitoring and resuscitation equipment	E
<b>4. INTENSIVE CARE CAPABILITY</b>	E
a. Designated surgical director  A physician who is providing this coverage should be credentialed by the TMD to participate in the resuscitation and treatment of trauma patients to include requirements such as board certification, trauma continuing medical education, compliance with trauma protocols, and participation in the trauma performance improvement program.	E
b. <u>Physician</u> , credentialed in critical care by the trauma director, on duty in ICU 24 hours a day or immediately available from in-hospital. <u>This system will be continuously monitored by the performance improvement program.</u>	<u>E</u>
c. Nurse-patient minimum ratio of 1:2 on each shift for patients identified as critical acuity	E
d. Equipment Appropriate monitoring and resuscitation equipment 1) the capability to measure pulmonary capillary wedge pressure 2) the capability to measure invasive systemic arterial pressure	E D D

e.	Support Services - Immediate access to clinical diagnostic services	E
	Toxicology screens need not be immediately available but are desirable. If available, results should be included in all performance improvement reviews.	
<b>5.</b>	<b>NURSING SERVICE</b>	
a.	All nurses caring for trauma patients throughout the continuum of care have ongoing documented knowledge and skill in trauma nursing to include pediatric and burn patients (i.e., trauma specific orientation, skills checklist, annual competencies, continuing education).	E
b.	50% of nurses caring for trauma patients certified in their area of specialty (e.g. CEN, CCRN, CNRN, CNOR, etc.)	D
c.	A validated acuity-based patient classification is utilized to define workload and number of nursing staff to provide safe patient care for all trauma patients throughout their hospitalization	<u>E</u>
d.	A written plan for acquisition of additional staff on a 24-hr. basis to support units with increased patient acuity, multiple emergency procedures and admissions	E
<b>6.</b>	<b>CLINICAL LABORATORY SERVICE</b> (available 24 hours a day)	
a.	Standard analyses of blood, urine, and other body fluids	E
b.	Blood typing and cross-matching, to include massive transfusion and emergency release of blood policies	E
c.	Coagulation studies	E
d.	Comprehensive blood bank or access to a community central blood bank and adequate hospital storage facilities	E
e.	Blood gases and pH determinations	E
f.	Serum and urine osmolality	D
g.	Microbiology	E
h.	Drug and alcohol screening	D
	Toxicology screens need not be immediately available but are desirable. If available, results should be included in all performance improvement reviews.	



i. Infectious disease Standard Operating Procedures	E
<b>7. SPECIAL RADIOLOGICAL CAPABILITIES</b>	
a. Angiography of all types	D
b. Sonography	D
c. Nuclear scanning	D
d. Computerized tomography	E
e. In-house CT technician 24 hours	D
<b>8. ACUTE HEMODIALYSIS CAPABILITY</b>	D
<b>9. ORGANIZED BURN CARE</b>  Physician-directed burn center staffed by nursing personnel trained in burn care and equipped properly for care of the extensively burned patient, or  Transfer agreement with nearby burn center or hospital with a burn unit.	E
<b>10. SPINAL CORD/HEAD INJURY REHABILITATION MANAGEMENT CAPABILITY</b> or appropriate services made available.  In circumstances where a designated spinal cord injury rehabilitation center exists in the region, early transfer should be considered; transfer agreements should be in effect.  In circumstances where a head injury center exists in the region, transfer should be considered in selected patients; transfer agreements should be in effect.	E
<b>11. REHABILITATION MEDICINE</b>  Physician-directed rehabilitation service, staffed by personnel trained in rehabilitation care and equipped properly for care of the critically injured patient, or  Transfer agreement when medically feasible to a rehabilitation facility.	E

<b>C. PERFORMANCE IMPROVEMENT</b>	
1. Organized Performance Improvement Program, to include trauma audit filters (see attached standard list).	E
2. Special audit for all trauma deaths and other specified cases.	E
3. Morbidity and mortality review.	E
<p>4. Multidisciplinary trauma conference for performance improvement activities, continuing education and problem solving to include documented nurse and prehospital participation.</p> <p>Regular and periodic multidisciplinary trauma conferences that include all members of the trauma team should be held. This conference will be for the purpose of performance improvement through critiques of individual cases.</p> <p>*This requirement is an essential element for the "lead" hospitals in a trauma service area.</p>	D*
5. Medical and nursing care audit, utilization review, and tissue review for compliance with trauma protocols and appropriate patient care throughout the continuum.	E
6. Feedback regarding trauma patient transfers will be provided to all transferring facilities.	E
<p>7. Trauma registry</p> <p>Documentation of severity of injury (by revised trauma score, age, injury severity score) and outcome (survival, length of stay, ICU length of stay) with monthly review of statistics. Data will be forwarded to the state trauma registry on at least a quarterly basis.</p>	E
8. Coordination with the regional trauma system, including adherence to regional protocols.	E
9. Published on-call schedule must be maintained for general surgeons and neurosurgeons, orthopedic surgeons, and other major specialists if available	E
10. Times of and reasons for diversion must be documented and reviewed by the performance improvement program	E
11. Performance improvement personnel - dedicated to and specific for the trauma program	D
12. Nursing performance improvement plan and ongoing activities documented which address the trauma patient population in all phases of trauma care	D
13. Written transfer agreements for patients needing a higher level of, or specialty, care if unavailable	E

14. A system for establishing an appropriate landing zone in close proximity to the hospital (if rotor wing services are available).	E
<b>D. OUTREACH PROGRAM</b>	
1. Telephone and on-site consultations with physicians of the community and outlying areas  *This requirement is an essential element for the "lead" hospitals in a trauma service area.	D*
2. Nurse participation in community outreach programs for the public and professionals is evident  *This requirement is an essential element for the "lead" hospitals in a trauma service area.	D*
<b>E. PUBLIC EDUCATION</b>	
A program to address the major injury problems within the hospital's service area. Documented participation in a RAC public education program is acceptable.	E
<b>G. TRAINING PROGRAM</b>	
1. Formal programs in trauma continuing education provided by hospital for:	
a. Staff physicians	D
b. Nurses	E
c. Allied health personnel, including physicians assistants	E
d. Community physicians	D
e. Prehospital personnel  *This requirement is an essential element for the "lead" hospitals in a trauma service area.	D*